Robert D Russell

List of Publications by Year
in descending order

56 papers	3,498 citations	186209 28 h-index	168321 53 g-index
58 all docs	58 docs citations	58 times ranked	1698 citing authors

#	Article	IF	Citations
1	Tapered stem geometry provides superior initial fixation stability to cylindrical stem geometry in the setting of severe bone loss: A finite element analysis. Engineering Reports, 2020, 2, e12218.	0.9	2
2	Femoral reconstruction in revision total hip arthroplasty. Current Orthopaedic Practice, 2017, 28, 256-258.	0.1	0
3	Stem geometry changes initial femoral fixation stability of a revised press-fit hip prosthesis: A finite element study. Technology and Health Care, 2016, 24, 865-872.	0.5	8
4	Tapered vs Cylindrical Stem Fixation in a Model of Femoral BoneÂDeficiencyÂinÂRevision Total Hip Arthroplasty. Journal of Arthroplasty, 2016, 31, 1352-1355.	1.5	22
5	Moving Mesh Methods on Parametric Surfaces. Procedia Engineering, 2015, 124, 148-160.	1.2	3
6	Perioperative Optimization of Comorbidities to Enhance Wound Healing in Total Joint Arthroplasty. Techniques in Orthopaedics, 2015, 30, 245-247.	0.1	1
7	Total Hip Arthroplasty, 1993â€“2013. Current Orthopaedic Practice, 2014, 25, 119-124.	0.1	2
8	Apixaban and Rivaroxaban Decrease Deep Venous Thrombosis But Not Other Complications After Total Hip and Total Knee Arthroplasty. Journal of Arthroplasty, 2013, 28, 1477-1481.	1.5	35
9	Area-Based Determination of Bone Loss Using the Glenoid Arc Angle. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2012, 28, 1030-1035.	1.3	32
10	Analysis of a moving collocation method for one-dimensional partial differential equations. Science China Mathematics, 2012, 55, 827-840.	0.8	4
11	Adaptive Moving Mesh Methods. Applied Mathematical Sciences (Switzerland), 2011, , .	0.4	170
12	Does An Enhanced Surface Finish Improve Acetabular Fixation in Revision Total Hip Arthroplasty?. Journal of Arthroplasty, 2011, 26, 644-648.	1.5	10
13	Anterior shoulder instability: a review of pathoanatomy, diagnosis and treatment. Current Reviews in Musculoskeletal Medicine, 2011, 4, 200-207.	1.3	99
14	An efficient approach for the numerical solution of the Mongeâ€“AmpÃ¨re equation. Applied Numerical Mathematics, 2011, 61, 298-307.	1.2	62
15	Vesicoacetabular Fistula in a Chronically Infected Total Hip Arthroplasty. Journal of Arthroplasty, 2010, 25, 659.e9-659.e12.	1.5	5
16	Monge-Kantorovich Approach for Grid Generation. , 2009, , .		0
17	Adaptivity with moving grids. Acta Numerica, 2009, 18, 111-241.	6.3	189
18	A study of moving mesh PDE methods for numerical simulation of blowup in reaction diffusion equations. Journal of Computational Physics, 2008, 227, 6532-6552.	1.9	47

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19	Management of posttraumatic extensive bone loss and osteomyelitis using a customized articulating knee spacer. Knee, 2008, 15, 268-271.	0.8	1
20	A Schwarz Waveform Moving Mesh Method. SIAM Journal of Scientific Computing, 2007, 29, 656-673.	1.3	12
21	A two-dimensional moving finite element method with local refinement based on a posteriori error estimates. Applied Numerical Mathematics, 2003, 46, 75-94.	1.2	43
22	Approaches for generating moving adaptive meshes: location versus velocity. Applied Numerical Mathematics, 2003, 47, 121-138.	1.2	38
23	Variational Mesh Adaptation Methods for Axisymmetrical Problems. SIAM Journal on Numerical Analysis, 2003, 41, 235-257.	1.1	5
24	A Moving Mesh Method Based on the Geometric Conservation Law. SIAM Journal of Scientific Computing, 2002, 24, 118-142.	1.3	56
25	A Moving Mesh Method for One-dimensional Hyperbolic Conservation Laws. SIAM Journal of Scientific Computing, 2001, 22, 1791-1813.	1.3	87
26	Adaptive mesh movement â€" the MMPDE approach and its applications. Journal of Computational and Applied Mathematics, 2001, 128, 383-398.	1.1	39
27	Comparison of two-dimensional r-adaptive finite element methods using various error indicators. Mathematics and Computers in Simulation, 2001, 56, 127-143.	2.4	15
28	An Error Indicator Monitor Function for an r-Adaptive Finite-Element Method. Journal of Computational Physics, 2001, 170, 871-892.	1.9	16
29	Adaptive mesh movement â€" the MMPDE approach and its applications. , 2001, , 383-398.		0
30	Anr-Adaptive Finite Element Method Based upon Moving Mesh PDEs. Journal of Computational Physics, 1999, 149, 221-244.	1.9	130
31	New Self-Similar Solutions of the Nonlinear SchrÃ¶dinger Equation with Moving Mesh Computations. Journal of Computational Physics, 1999, 152, 756-789.	1.9	50
32	A moving mesh method in multiblock domains with application to a combustion problem. Numerical Methods for Partial Differential Equations, 1999, 15, 449-467.	2.0	11
33	A Study of Monitor Functions for Two-Dimensional Adaptive Mesh Generation. SIAM Journal of Scientific Computing, 1999, 20, 1978-1994.	1.3	91
34	A high dimensional moving mesh strategy. Applied Numerical Mathematics, 1998, 26, 63-76.	1.2	43
35	Moving Mesh Strategy Based on a Gradient Flow Equation for Two-Dimensional Problems. SIAM Journal of Scientific Computing, 1998, 20, 998-1015.	1.3	107
36	On the Compuation of Lyapunov Exponents for Continuous Dynamical Systems. SIAM Journal on Numerical Analysis, 1997, 34, 402-423.	1.1	162

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37	Analysis of Moving Mesh Partial Differential Equations with Spatial Smoothing. SIAM Journal on Numerical Analysis, 1997, 34, 1106-1126.	1.1	72
38	Spline Collocation Differentiation Matrices. SIAM Journal on Numerical Analysis, 1997, 34, 2274-2287.	1.1	18
39	Computation and Continuation of Homoclinic and Heteroclinic Orbits with Arclength Parameterization. SIAM Journal of Scientific Computing, 1997, 18, 69-93.	1.3	21
40	Finite Difference Preconditioning for Solving Orthogonal Collocation Equations for Boundary Value Problems. SIAM Journal on Numerical Analysis, 1996, 33, 2268-2285.	1.1	10
41	Moving Mesh Methods for Problems with Blow-Up. SIAM Journal of Scientific Computing, 1996, 17, 305-327.	1.3	147
42	A moving collocation method for solving time dependent partial differential equations. Applied Numerical Mathematics, 1996, 20, 101-116.	1.2	55
43	Moving Mesh Methods Based on Moving Mesh Partial Differential Equations. Journal of Computational Physics, 1994, 113, 279-290.	1.9	173
44	Unitary Integrators and Applications to Continuous Orthonormalization Techniques. SIAM Journal on Numerical Analysis, 1994, 31, 261-281.	1.1	124
45	Moving Mesh Partial Differential Equations (MMPDES) Based on the Equidistribution Principle. SIAM Journal on Numerical Analysis, 1994, 31, 709-730.	1.1	287
46	Linear system solvers for boundary value ODEs. Journal of Computational and Applied Mathematics, 1993, 45, 103-117.	1.1	5
47	Some Numerical Aspects of Computing Inertial Manifolds. SIAM Journal of Scientific Computing, 1993, 14, 19-43.	1.3	22
48	On the Structure of Jacobians for Spectral Methods for Nonlinear Partial Differential Equations. SIAM Journal on Scientific and Statistical Computing, 1992, 13, 541-549.	1.5	3
49	Moving Mesh Techniques Based upon Equidistribution, and Their Stability. SIAM Journal on Scientific and Statistical Computing, 1992, 13, 1265-1286.	1.5	25
50	Numerical Calculation of Invariant Tori. SIAM Journal on Scientific and Statistical Computing, 1991, 12, 607-647.	1.5	59
51	A Riccati Transformation Method for Solving Linear BVPs. I: Theoretical Aspects. SIAM Journal on Numerical Analysis, 1988, 25, 1055-1073.	1.1	46
52	A Riccati Transformation Method for Solving Linear BVPs. II: Computational Aspects. SIAM Journal on Numerical Analysis, 1988, 25, 1074-1092.	1.1	27
53	Conditioning of Collocation Matrices and Discrete Greenâ€™s Functions. SIAM Journal on Numerical Analysis, 1986, 23, 376-392.	1.1	12
54	The Close Relationships between Methods for Solving Two-Point Boundary Value Problems. SIAM Journal on Numerical Analysis, 1985, 22, 280-309.	1.1	48

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55	Difficulties in evaluating differential equation software. Lecture Notes in Mathematics, 1982, , 175-184.	0.1	0
56	A Comparison of Collocation and Finite Differences for Two-Point Boundary Value Problems. SIAM Journal on Numerical Analysis, 1977, 14, 19-39.	1.1	43